

AIRNow-International

Reporting and Sharing Air Quality Data Worldwide



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Today's Questions

- **What** data or service does this project produce?
- **How** does this project deliver data / services? ***How can GEOSS help with that delivery?***
- **Who** are this project's intended target audience / users?
- What **decision/action** does this project support?
- What particular data sharing issues face the AQ community?

About AIRNow – A Brief History

1998: Beginning (northeast U.S.)

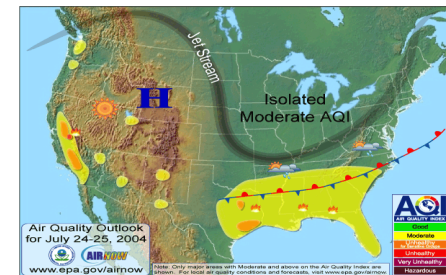
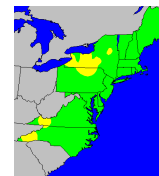
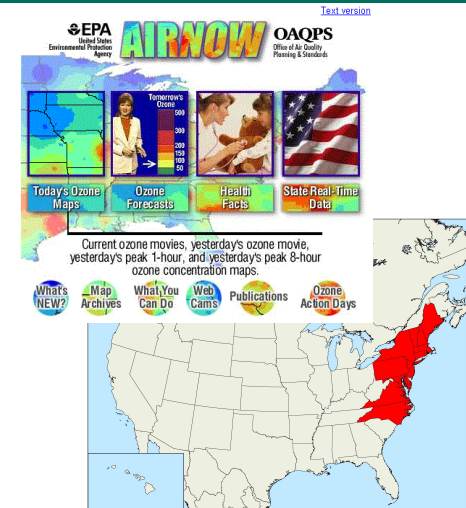
1999-2002: Expanding coverage

2003-2009: New services

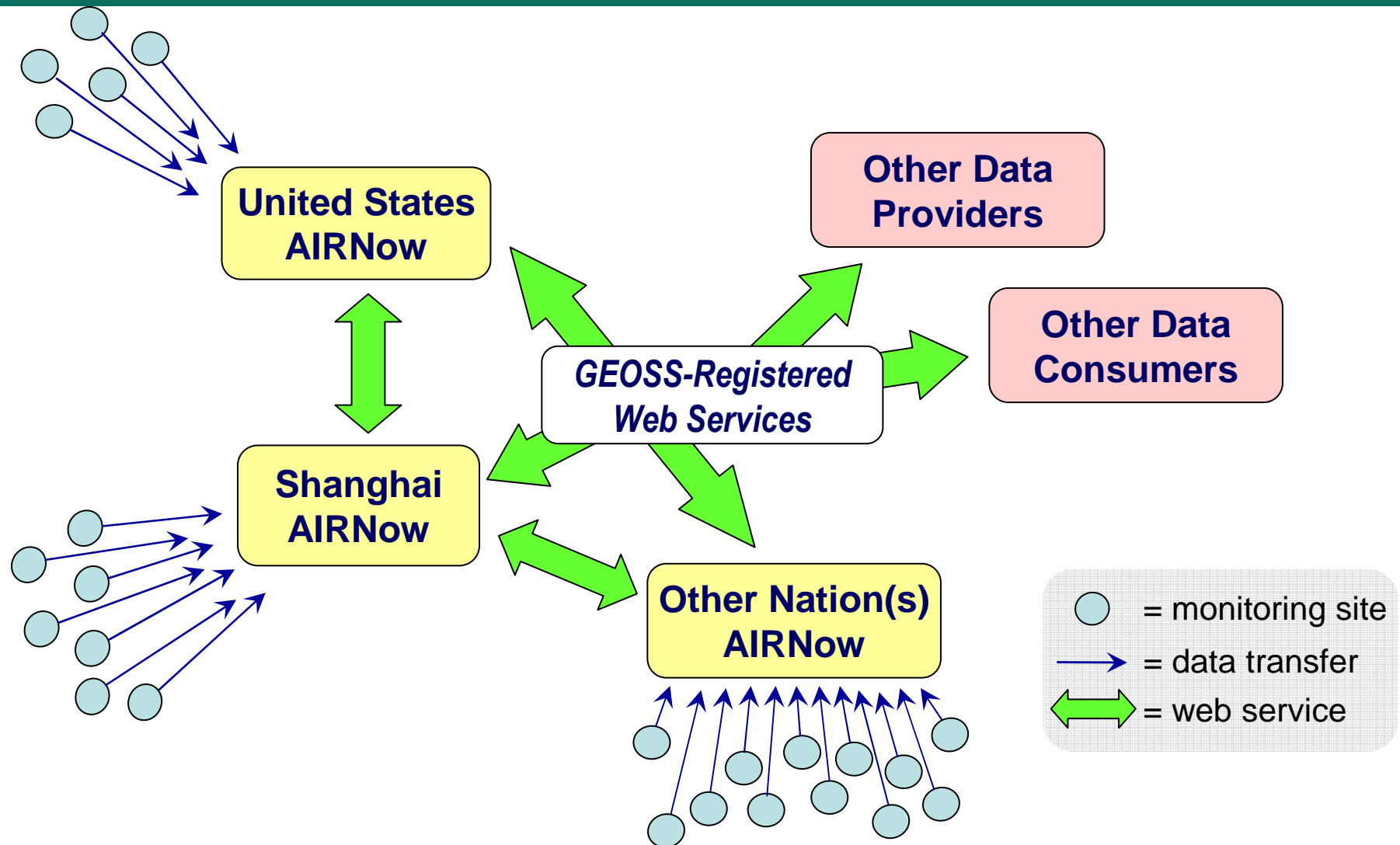
- » AIRNow-Tech (technical web site)
- » AIRNow Gateway (distribution service)
- » Coordination with media
- » More pollutants

2009+: AIRNow-International

- » New software system
- » Coordination with other countries



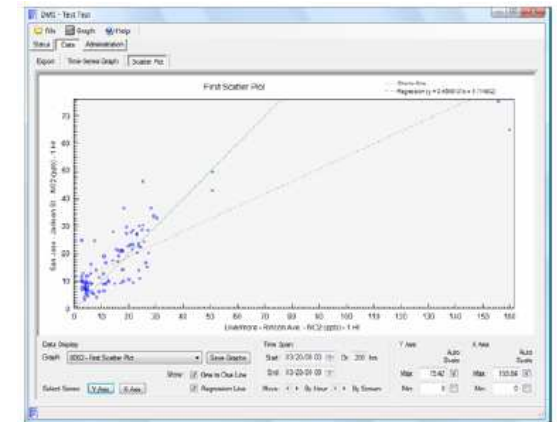
AIRNow-International Concept



What data or service does this project produce?

- **Data/Services**

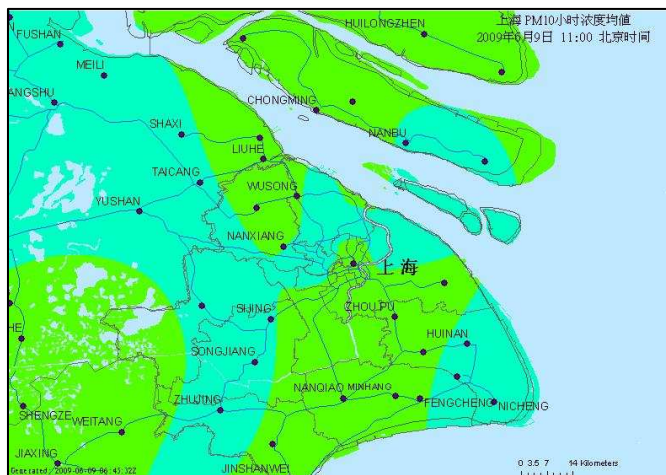
- Real-time air quality information in the form of:
 - Maps
 - Quality assured Data
 - Files
 - Web Services



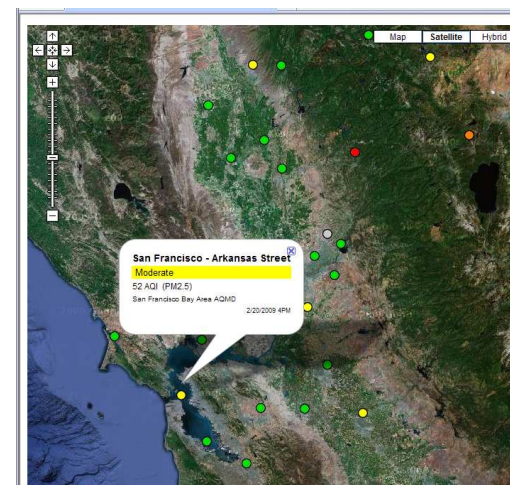
What data or service does this project produce?

- Web services

Web Service	Description	Outputs
WCS_Point	Extraction of data points	CSV, AQCSV, KML, NetCDF
WCS_TimePoint	Extraction of a time series for a specific parameter, site, and time range	CSV, AQCSV, KML, NetCDF
WCS_Grid	Extraction of a grid data subset	NetCDF, KML

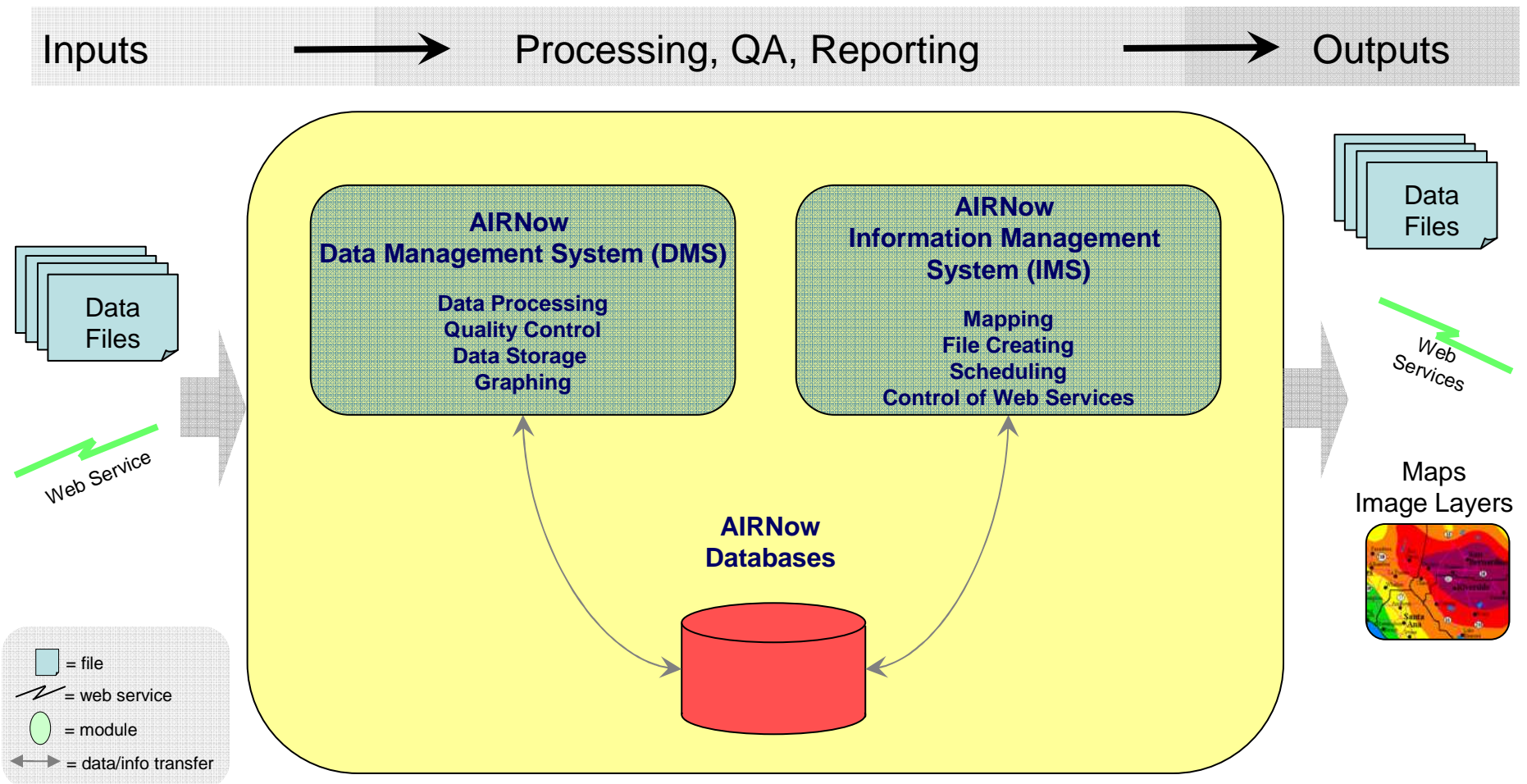


PM₁₀ API map of Shanghai

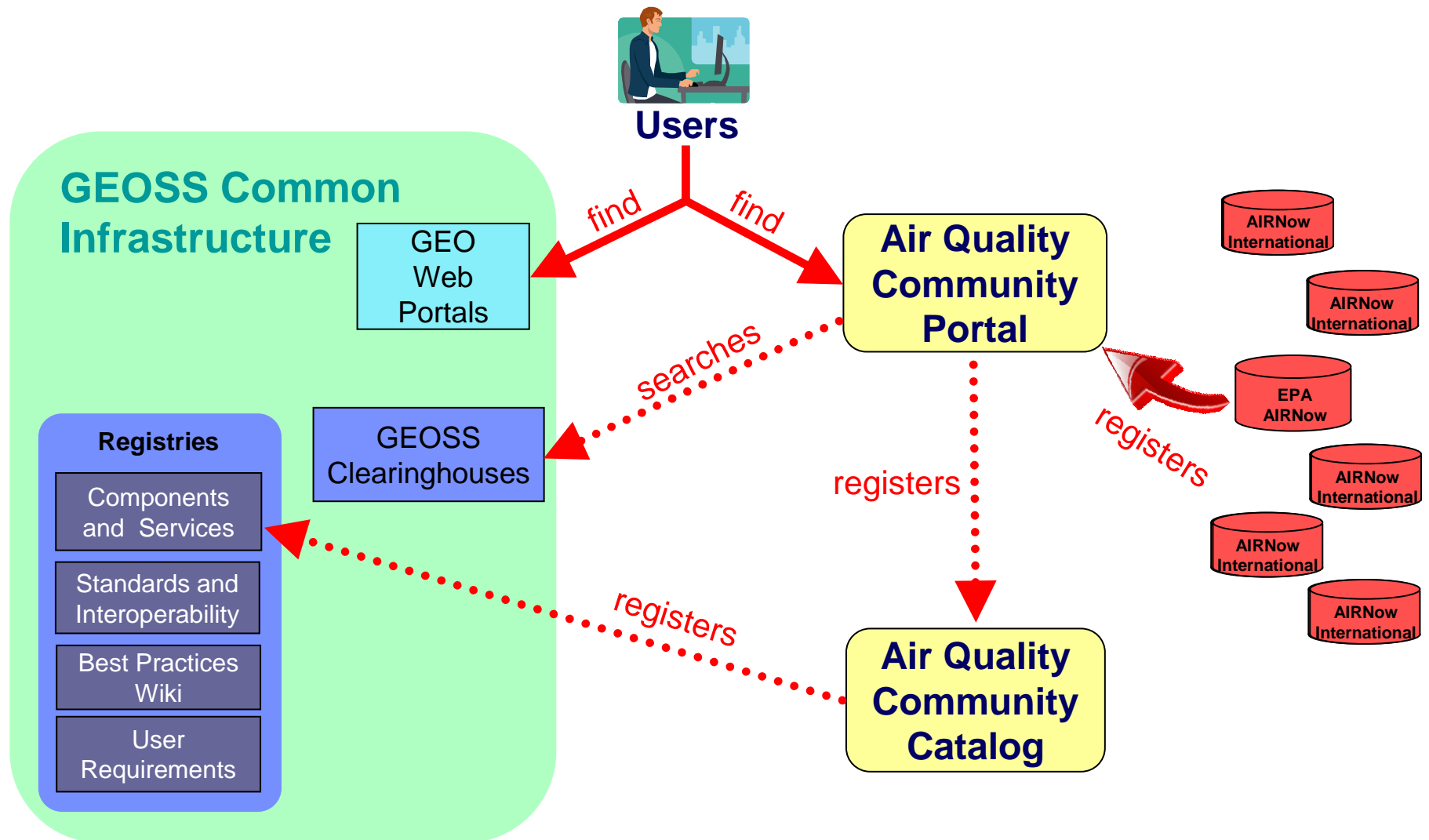


KML output of PM_{2.5}

How does this project deliver data / services?



How Can GEOSS Help with Delivery?



Who are this project's intended target audience / users?

Users

- Air Quality Agencies
 - Collect the Data
 - Create the Forecast
 - Operate the software in order to manage and distribute the information

Consumers

- Public
- Researchers
- Air Quality Agencies

What **decision/action** does this project support?

Consumers

— Public

- Will I exercise outside today?
- Should I take my inhaler?
- Should I carpool, telecommute or take public transportation?
- Should I send my children outside to play today?

— Researchers

- Should I tweak my forecast model?
- Does this air quality episode support my hypothesis?

— Air Quality Agencies

- Is this an exceptional event?
- Should we issue a burn ban today?
- Will today's air quality lead to a violation of an air quality standard?

Today's Discussion

- What particular data sharing issues face the AQ community?
 - Standardization
 - Parameters names
 - File contents and formats
 - Data sharing rights/Trust

Contacts

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